Avago Technologies Docket No.: 70030429-1

## **AMENDMENTS**

## Listing of Claims:

The following listing of claims replaces all prior versions.

Please amend the pending claims as indicated below:

- 1 1. (Currently amended) A reflective imaging encoder comprising:
- 2 a substrate;
- an encapsulated emitter mounted on the substrate, the encapsulated emitter
- 4 comprising a light emitting element and an encapsulant, wherein the encapsulant has
- an encapsulant optical axis and the light emitting element is mounted offset from the
- 6 encapsulant optical axis, the encapsulated emitter having an emitter optical axis and
- 7 emitting light that is offset from the emitter optical axis;
- a diffuse reflective coder reflecting light from the encapsulated emitter;
- an imaging lens forming an inverted image of the reflected light from the
- 10 coder;
- an image detector mounted on the substrate receiving the inverted image from
- the imaging lens; and
- a baffle between the encapsulated emitter and the image detector.
- 1 2. (Previously presented) The reflective imaging encoder of Claim 1 where the
- 2 image detector is a photodiode array.
- 1 3. (Previously presented) The reflective imaging encoder of Claim 1 where the
- 2 image detector is a CMOS imaging sensor.
- 1 4. (Previously presented) The reflective imaging encoder of Claim 1 where the
- 2 encapsulated emitter is a light emitting diode.
- 1 5. (Canceled)
- 1 6. (Canceled)
- 1 7. (Previously presented ) The reflective imaging encoder of Claim 4 where the

- 2 encapsulated emitter is a packaged light emitting diode.
- 1 8. (Canceled)
- 1 9. (Canceled)
- 1 10. (Canceled)
- 1 11. (Currently amended) The reflective imaging encoder of Claim 4 6 where the
- 2 light emitting diode includes a reflector cup.
- 1 12. (Canceled)
- 1 13. (Canceled)
- 1 14. (Canceled)
- 1 15. (Previously presented) The reflective imaging encoder of Claim 4 where the
- 2 encapsulated emitter is a plurality of light emitting diodes.
- 1 16. (Original) The reflective imaging encoder of Claim 1 where the imaging lens
- 2 is separate from the detector.
- 1 17. (Currently amended) The reflective imaging encoder of Claim 1 where the
- 2 imaging lens is incorporated into the encapsulation of the image detector.
- 1 18. (Currently amended) The reflective imaging encoder of Claim 1 further
- 2 comprising an aperture between the <u>coder</u> detector and the imaging lens.
- 1 19. (Original) The reflective imaging encoder of Claim 1 further including an
- 2 aperture between the imaging lens and the detector.
- 1 20. (Currently amended) The reflective imaging encoder of Claim 1 further

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- 2 including a first aperture between the coder and the imaging lens and a second
- 3 aperture between the imaging lens and the <u>image</u> detector.
- 1 21.-25. (Canceled)
- 1 26. (Original) The reflective imaging encoder of Claim 1 where the detector is
- 2 mounted on the optical axis of the imaging lens.
- 1 27. (Canceled)